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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/044,604	01/11/2002	James Fraivillig	07009.011002	1887
22511 7	590 07/02/2004		EXAM	INER
OSHA & MAY L.L.P. 1221 MCKINNEY STREET HOUSTON, TX 77010			TRINH, MINH N	
			ART UNIT	PAPER NUMBER
,			3729	
		DATE MAILED: 07/02/2004		

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
		10/044,604	FRAIVILLIG, JAMES			
	Office Action Summary	Examiner	Art Unit			
		Minh Trinh	3729			
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1)⊠	Responsive to communication(s) filed on 11	January 2002.				
'=	This action is <b>FINAL</b> . 2b) ☐ This action is non-final.					
3)□	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Dispositi	on of Claims					
<ul> <li>4)  Claim(s) 1-29 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> <li>5)  Claim(s) is/are allowed.</li> <li>6)  Claim(s) is/are rejected.</li> <li>7)  Claim(s) is/are objected to.</li> <li>8)  Claim(s) 1-29 are subject to restriction and/or election requirement.</li> </ul>						
Applicati	on Papers					
9)	The specification is objected to by the Exam	iner.				
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachmen	He)					
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)						
2) Notice	e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449 or PTO/SB/r r No(s)/Mail Date	Paper No(s)/Mail D	Pate Patent Application (PTO-152)			

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## **DETAILED ACTION**

## Election/Restrictions

- 1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - Claims 1-15, drawn to a method for manufacturing a PCB bonded to a heat sink, classified in class 29, subclass 840.
  - II. Claim 16, drawn to a method for manufacturing a PCB bonded to a heat sink, classified in class 29, subclass 843.
  - III. Claims 17-29, drawn to a method for manufacturing flex PCB, classified in class 29, subclass 829

The inventions are distinct, each from the other because of the following reasons: Inventions I and II are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require "a composition of the adhesive layer is being different from that second adhesive layer " (see claim 16, lines 7-10) as required by the subcombination invention II. The invention II has separate utility such as the second adhesive not being fully activated at a temperature used in the adhering the conductor layer to the bond film as required by the invention II (see claim 16, lines 8-10).

Inventions I and III are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does

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manufacturing a flexible PCB.

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not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require "a release sheet between a first bond film and a second bond film (see claim 17, line 2) as required by the subcombination invention III. The invention III has separate utility such as for

Inventions II and III are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require "a release sheet between a first bond film and a second bond film (see claim 17, line 2) as required by the subcombination invention III. The invention III has separate utility such as for manufacturing a flexible PCB, etc.,

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, and the search required for Group I is not required for Group II or III, because of their recognized divergent subject matter, restriction for examination purposes as indicated above is proper.

2. A telephone call was made to Richard A. Fagin on 6/29/04 to request an oral election to the above restriction requirement, but did not result in an election being

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made. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement is traversed (37 CFR 1.143).

## Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Trinh whose telephone number is (703) 305-2887. The examiner can normally be reached on Monday -Thursday 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on (703) 308-1789. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Minh Trinh

Patent Examiner Group 3729

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